

## Special Issue

# Microplastics and Nanoplastics Toxicology and Detection in Biological Matter

### Message from the Guest Editors

The ubiquitous presence of microplastics and nanoplastics in environmental and biological systems has emerged as one of the most pressing challenges in contemporary toxicology and environmental health. Polymer fragments, ranging from nanometers to millimeters in size, have been detected across diverse biological matrices, from marine organisms to human tissues, raising critical questions about their long-term health implications. This Special Issue invites cutting-edge research addressing the complex interplay between plastic particle exposure, bioaccumulation, the impact of ageing and degradation, and toxicological effects in living systems. Topics of particular interest include novel detection and quantification methods, interactions at the cell-level, tissue-specific accumulation patterns, inflammatory and oxidative stress responses, endocrine disruption mechanisms, and standardized protocols for biological sample analysis. Interdisciplinary contributions bridging environmental science, toxicology, analytical chemistry, and public health are especially encouraged.

### Guest Editors

Dr. Łukasz Kurach

Independent Laboratory of Behavioral Studies, Medical University of Lublin, 1A Chodzki Str, 20-093 Lublin, Poland

Dr. Agnieszka Dąbrowska

Spectroscopy of Nanomaterials Research Group, Faculty of Chemistry, University of Warsaw, Pasteura 1 Str., 02-093 Warsaw, Poland

### Deadline for manuscript submissions

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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[applsci@mdpi.com](mailto:applsci@mdpi.com)

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, Italy

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